		9 (modified)	UTSD:771US	UTSD:771US/SLH 10/0			rial No. 1074,220		
62		d Publications fo		Applicant Tadashi Kum	amoto	et al.			
OUT THE STATE OF		everal sheets if neces	Filing Date: February 12,	2002		,	Group: Unknown		
P.M.C.	S. Patent See P	Documents Page 1	Foreign	Patent Documen See Page 1			0	Other Art ee Page 1	
			U.S. Pat	ent Docum	ents				
Exam. Init.	Ref. Des.	Document Number	Date	Name	Clas	SS	Sub Class	Filing Date of App.	
		· .	Foreign P	atent Docu	ment				
Exam. Init.	Ref. Des.	Document Number	Date	Country	Clas		Sub Class	Translation Yes/No	
	 				 				
	<u> </u>	<u> </u>						<u> </u>	
	Other .	Art (Includi	ing Autho	r, Title, Dat	e Per	tin	ent Pa	ges, Etc.)	
Exam. Init.	Other A	Art (Includi	ing Autho	r, Title, Dat Citatio		tin	ent Pa	ges, Etc.)	
Exam.	Ref.	Berchtold et al.	, "Human mon	Citatio	on Iritic cel	lls ex	press func	tional P2X and P2Y	
Exam.	Ref. Des.	Berchtold et al. receptors as we	, "Human mon	Citation ocyte derived denotition ocytes, "FEBS La	on Iritic cel ett., 458	lls ex 3:424	press func -428, 1999	tional P2X and P2Y	
Exam.	Ref. Des.	Berchtold et al. receptors as we Betto, et al., "Et 7912, 1999. Biederbick, et a	, "Human mon ll as ecto-nucle cto-ATPase acti	Citation ocyte derived denotition ocytes, "FEBS La	on Iritic cel ett., 458 glycan (lls ex 3:424 adha	press func -428, 1999 lin)" <i>J. Bio</i>	etional P2X and P2Y 9. ol. Chem., 274: 7907-	
Exam.	Ref. Des. C1	Berchtold et al. receptors as we Betto, et al., "Ed 7912, 1999. Biederbick, et al lysosomal/autor Chadwick and I members (CD3)	, "Human mon ll as ecto-nucle cto-ATPase action." A human in chagic vacuoles Frischauf, "The 9L2, CD39L3,	Citation ocyte derived denoted octidases," FEBS Levity of alpha-sarco tracellular apyrase-" J. Cell Sci., 112:	dritic celett., 458 glycan (like pro 2473-24 amily: i	lls ex 3:424 adha tein, 484, denti	LALP70, I	otional P2X and P2Y 9. ol. Chem., 274: 7907- localizes to three new human , and a member of the	
Exam.	Ref. Des. C1 C2	Berchtold et al. receptors as we Betto, et al., "Ed 7912, 1999. Biederbick, et alysosomal/autope Chadwick and Imembers (CD3) gene family fro	, "Human mon ll as ecto-nucle cto-ATPase acti l., "A human in phagic vacuoles Frischauf, "The 9L2, CD39L3, m Drosophila ret al., "P2Z/P2	ocyte derived deno otidases," FEBS La vity of alpha-sarco tracellular apyrase- "J. Cell Sci., 112: CD39-like gene f and CD39L4), the nelanogaster," Ger	Iritic ceett., 458 glycan (like pro 2473-24 amily: i ir muri	lls ex 3:424 (adha tein, 484, dentine ho	LALP70, 11999. fication of omologues, 57-367, 19	otional P2X and P2Y 9. ol. Chem., 274: 7907- localizes to three new human , and a member of the	
Exam.	Ref. Des. C1 C2 C3 C4	Berchtold et al. receptors as we Betto, et al., "Ed 7912, 1999. Biederbick, et al lysosomal/autor Chadwick and I members (CD3) gene family fro Coutinho-Silva Physiol. 276:C	, "Human mon ll as ecto-nucle cto-ATPase action." A human in phagic vacuoles Frischauf, "The 9L2, CD39L3, m Drosophila ret al., "P2Z/P21139-C1147, 1911, "Nucleotide	Citation ocyte derived denoted asses," FEBS Lavity of alpha-sarco tracellular apyrase." J. Cell Sci., 112: CD39-like gene for and CD39L4), the melanogaster," General CD39L4, the melanogaster of the company of the co	lritic celett., 458 glycan (like pro 2473-24 amily: it murinomics, indent ap	adha tein, 484, denti 50:3	LALP70, 1 fication of omologues, 57-367, 19 sis of dend	otional P2X and P2Y 9. ol. Chem., 274: 7907- localizes to Three new human 1, and a member of the 1998.	
Exam.	Ref. Des. C1 C2 C3 C4	Berchtold et al., receptors as we Betto, et al., "Er 7912, 1999. Biederbick, et alysosomal/autope Chadwick and Imembers (CD3) gene family fro Coutinho-Silva Physiol. 276:C. Di Virgilio, et acells," Blood, 9	, "Human mon ll as ecto-nucle cto-ATPase acti l., "A human in phagic vacuoles Frischauf, "The 9L2, CD39L3, m Drosophila ret al., "P2Z/P21139-C1147, 19.1, "Nucleotide 7: 587-600, 200 al., "Ecto-ATPase action of the property	ocyte derived denotidases," FEBS Lavity of alpha-sarco tracellular apyrase." J. Cell Sci., 112: CD39-like gene f and CD39L4), the melanogaster," General EX7 receptor-dependence of the company of the co	lritic celett., 458 glycan (like pro 2473-24 amily: in murinomics, andent ap	Ills ex 3:424 (adha tein, 484, dentine ho 50:3.	LALP70, 1 1999. fication of omologues, 57-367, 19 sis of dend	otional P2X and P2Y 9. ol. Chem., 274: 7907- localizes to three new human, and a member of the 1998. dritic cells, " Am. J.	

25144084.1

Examiner:	AM C	DATE CONSIDERED:	12	11	04	

EXAMINER: INITIAL IF REPRENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

For	m PTO-1449 (modified)		Atty. Docket No.	Serial No.
			UTSD:771US/SLH	10/074,220
PEDIGI	of Patents and Publications for	Applicant's	Applicant	
\o,~	.1 \		Tadashi Kumamoto	et al.
ADD	TIPFORMATION DISCLOSURE S	TATEMENT		
APR 0 8 2002	গ্র		Filing Date:	Group:
PRADEMINE	(Use several sheets if necessa	ry)	February 12, 2002	Unknown
TRADEMAN	U.S. Patent Documents	Foreign P	atent Documents	Other Art
	See Page 1	S	ee Page 1	See Page 1

Other Art (Including Author, Title, Date Pertinent Pages, Etc.) Exam. Citation Init. Des. C9 Enjyoji, et al. "Targeted disruption of cd39/ATP diphosphohydrolase results in disordered hemostasis and thromboregulation," Nat. Med., 5:1010-1017, 1999. C10 Ferrari, et al. "The P2 purinergic receptors of human dendritic cells: identification and coupling to cytokine release," FASEB J., 14: 2466-2476, 2000. C11 Filippini, et al., "Extracellular ATP in T-lymphocyte activation: possible role in effector functions," Proc. Natl. Acad. Sci. U. S. A, 87: 8267-8271, 1990. C12 Girolomoni et al., "Epidermal Langerhans cells are resistant to the permeabilizing effects of extracellular ATP: in vitro evidence supporting a protective role of membrane ATPase," J. Invest Dermatol., 100:282-287, 1993. C13 Heine, et al., "Functional characterization of rat ecto-ATPase and ecto-ATP diphosphohydrolase after heterologous expression in CHO cells," Eur J Biochem., 262(1):102-107, 1999. Imai, et al., "CD39 modulates IL-1 release from activated endothelial cells," Biochem. Biophys. C14 Res. Commun., 270: 272-278, 2000. C15 Knowles and Nagy, "Inhibition of an ecto-ATP-diphosphohydrolase by azide," Eur. J. Biochem., 262:349-357, 1999. C16 Liu et al. "Expression and a role of functionally coupled P2Y receptors in human dendritic cells," FEBS Lett., 445:402-408, 1999. C17 Marriott, et al., "Extracellular uridine nucleotides initiate cytokine production by murine dendritic cells," Cell. Immunol., 195:147-156, 1999. C18 Matsue et al., "Induction of antigen-specific immunosuppression by CD95L cDNAtransfected "killer" dendritic cells," Nature Med., 5:930-937, 1999. C19 Matsue, et al., "Keratinocyte-derived IL-7 serves as a growth factor for dendritic epidermal T-cells in mice," J. Immunol., 151:6012-6019, 1993. C20 Mummert, et al., "Development of a peptide inhibitor or hyaluronan-mediated leukocyte trafficking," J. Exp. Med., 192:769-779, 2000. C21 Mutini et al., "Mouse dendritic cells express the P2X₇ purinergic receptor; characterization and possible participation in antigen presentation," J. Immunol., 163:1958-1965, 1999.

Form PTO-1449 (modified)	Atty. Docket No.	Serial No.
		UTSD:771US/SLH	10/074,220
P E sist of Patents and I	Publications for Ap	plicant's Applicant	
\sim \sim \sim		Tadashi Kumamoto e	t al.
APR 0 8 2002 INFORMATION	Disclosure Stat	EMENT	
AIN O D ZOOZ		Filing Date:	Group:
(V) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ral sheets if necessary)	February 12, 2002	Unknown
U.S. Patent Do	cuments	Foreign Patent Documents	Other Art
See Page	2 1	See Page 1	See Page 1

Other Art (Including Author, Title, Date Pertinent Pages, Etc.) Exam. Citation Init. Des. Nihei, et al., "Pharmacologic properties of P22/P2X7 receptor characterized in murine dendritic C22 cells: role on the induction of apoptosis," Blood, 96: 996-1005, 2000. C23 Ralevic and Burnstock, "Receptors for purines and pyrimidines," Pharmacol. Rev. 50:413-492, C24 Sellers, et al., "Adenosine nucleotides acting at the human P2Y1 receptor stimulate mitogenactivated protein kinases and induce apoptosis," J. Biol. Chem., 276: 16379-16390, 2001. C25 Sevigny, et al., "Identification and characterization of a novel hepatic canalicular ATP diphosphohydrolase," J. Biol. Chem., 275: 5640-5647, 2000. C26 Wang, and Guidotti, "Golgi localization and functional expression of human uridine diphosphatase," J. Biol. Chem., 273: 11392-11399, 1998. C27 Warny, et al., "P2Y(6) nucleotide receptor mediates monocyte interleukin-8 production in response to UDP or lipopolysaccharide," J. Biol. Chem., 276: 26051-26056, 2001. C28 Williams and Jarvis, "Purinergic and pyrimidinergic receptors as potential drug targets," Biochem. Pharmacol., 59:1173-1185, 2000. C29 Xu, et al., "Successive generation of antigen-presenting, dendritic cell lines from murine epidermis," J. Immunol., 154:2697-2705, 1995. C30 Zhong and Guidotti, "A yeast Golgi E-type ATPase with an unusual membrane topology," J.Biol. Chem., 274:32704-32711, 1999. C3:1 Ziganshina, et al., "Acute paw oedema formation induced by ATP: re-evaluation of the mechanisms involved," Inflamm. Res., 45: 96-102, 1996. C32 Zinchuk et al., "Ecto-ATPase activity in cerebellum: implication to the function of synaptic transmission," Brain Res. 815:111-115, 1999.

25144084.1

EXAMINER: /MM/M	DATE CONSIDERED:	12/21/04
EXAMINER: INITIAL IF REFERENCE CONSIDERED WHETHER OR NOT CIT	TATION IS IN CONFORMANCE WITH N	MPEP609; DRAW LINE THROUGH
CITATION IF NOT IN CONFORMANCE AND NOT CONCIDED IN INCLUDE CO.	DV OF THIS BODA WITH MEYT COMA	LINICATION TO ABBY ICANT

INFORMATION DISCLOSURE STATEMENT			Tadashi Kur	Tadashi Kumamoto et al.					
8		several sheets if neces		Filing Date: Group: TECH CEN					
27 5 U		t Documents		February 12 n Patent Documen		1645			
die p		Page 1	101019	See Page 1			Other Art See Page 1		
<u> </u>	· · · · · · · · · · · · · · · · · · ·		IIS Par	tent Docum	onte				
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.		
	T		Foreign P	atent Docu	ments				
Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No		
14	B1	WO 98/28437	7/2/98	PCT					
4 /	Other	Art (Includi	ng Autho	r, Title, Date	e Pertine	ent Pag	es, Etc.)		
Exam. Init.	Ref. Des.				Citation				
b	C33	Homolya et al., release of ATP a	'Cell to cell con nd UTP in pola	Il communication in response to mechanical stress via bilateral a polarized epithelia," <i>J. Cell Biol.</i> , 150:1349-1359, 2000.					
	C34	Kaplan et al., "E enhance basic fit Endocrinology, 1	roblast growth	eleotides act throug factor-induced pro 1996.	gh P _{2U} purino oliferation in	ceptors to e sheep chon	levate [Ca ²⁺] and drocytes,"		
	C35	Kaplan et al., "E 3', 5'-monophos Endocrinology, 1	phate response	to parathyroid hor	otides potentiate the cytosolic Ca ²⁺ , but not cyclic adenosine parathyroid hormone in rat osteoblastic cells," 295. Idothelial CD73 by adenosine: paracrine pathway for ion," <i>J. of Immunology</i> , 165:5262-5268, 2000.				
Un	C36	Narravula et al., enhanced endoth	"Regulation of elial barrier fun	endothelial CD73 action," J. of Immus					
V									

25281397.1

Examiner:	[W	IMV	DATE CONSIDERED:	12	121	104
EXAMINER: INITIAL IF RE CITATION IF NOT IN CONFO	FERENCE CONSIDERI RMANCE AND NOT CO	ED, WHETHER OR NOT CI ONSIDERED. INCLUDE CO	TATION IS IN CONFORMANCE WITH MP	EP609;	DRAW LII	E THROUGH